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Virginia Port Authority 600 World Trade Center Norfolk, Virginia 23510-1679 Telephone (757) 683-8000 Fax (757) 683-8500

Jerry A. Bridges Executive Director

January 31, 2008

Matthew O. Tucker, Director Virginia Department of Rail and Public Transportation 1313 East Main Street, Suite 300 Richmond, VA 23219

RE: Rail Enhancement Funding Application Norfolk Portsmouth Belt Line Railroad Acquisition and Repair

Dear Matt,

Please accept the enclosed Rail Enhancement Funding application package submitted on behalf of the Virginia Port Authority (VPA). This application is seeking funding for land acquisition, engineering design, and construction services for the Norfolk Portsmouth Belt Line (NPBL) Railroad Acquisition and Repair.

The Norfolk Portsmouth Belt Line (NPBL) Railroad Acquisition and Repair project will enable Norfolk International Terminals (NIT) to expand its train assembly and movement capacity, improve port railroad access and routing, and increase operating efficiency. The project involves the acquisition of 33.5 acres of NPBL property, and repair/upgrade of the freight rail yard, rail infrastructure, and associated railroad track totaling 16,632 track feet. The property is currently owned by the Norfolk & Portsmouth Belt Line Railroad Company.

VPA's acquisition of the NPBL property would be done in conjunction with the Virginia Department of Transportation (VDOT) award of a \$17 million project in the Fall of 2008 to construct a bridged underpass to eliminate the at-grade rail crossing located on Hampton Blvd near Greenbrier Ave. The benefit of this bridged underpass will be maximized by the acquisition of the NPBL property by facilitating efficient train assembly, staging, and rail transport of containers to and from NIT, while allowing uninterrupted vehicle traffic flow on Hampton Blvd. Current funding of the NPBL project will allow the land acquisition and rail repair process to occur simultaneously with the scheduled design and construction of the bridged underpass, so that both projects come to full operational use immediately upon completion.

With a projected growth rate in container traffic in the Port of Virginia at an annual rate of 4.3%, the NPBL project will play a key role in the NIT overall strategy of increasing the annual volume of containers moved by rail from 250,000 TEU's to 500,000 TEU's. It will reduce the number of interruptions of vehicle traffic flow on Hampton Blvd at the Terminal Blvd at-grade rail crossing, due to incoming trains, as well as train assembly and staging operations. Over 21,000 vehicles per day travel over this crossing along this major access route to the U.S. Navy's largest naval base. It will also provide NIT with the capability to assemble full 6000 foot long trains.

The additional rail footage acquired and made usable through the NPBL Railroad Acquisition and Repair project will ensure train staging and assembly capacity meets terminal container production demand. The additional NPBL capacity will maximize the benefit of the Hampton Blvd – Greenbrier underpass project, significantly decrease at-grade rail crossings at Hampton/Terminal Blvd, decrease local and regional traffic congestion, and increase the Port's competitiveness while supporting several VTrans2025 and Virginia State Rail Plan goals.

The Virginia Port Authority will provide a 50% match for this project by funding up to \$4,375,000 in acquisition and design/construction costs through terminal revenue funds from Virginia International Terminals (VIT) operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia). We plan to acquire the property by October 2008, award design by December 2008, and award construction by October 2009. We anticipate construction to be complete by September 2010.

Please let us know if any additional information is needed, or if a briefing would facilitate a better understanding of the NPBL Railroad Acquisition and Repair project, and the importance of this Grant application to its ultimate success.

Sincerely,

Jerry/A. Bridges Executive Director

**Enclosures** 

#### DRPT Rail Enhancement Fund Project Application Form

#### Applicant:

Virginia Port Authority 600 World Trade Center Norfolk, VA 23510

#### **Contact Information:**

Responsible Person/Title: Jeff Florin/Chief Engineer

Telephone: 757-683-2150; Fax: 757-683-2151; Email: jflorin@ portofvirginia.com

Project Manager/Title: Kevin Abt/Deputy Chief Engineer

Telephone: 757-683-2139; Fax: 757-683-2151; Email: kabt@portofvirginia.com

Project Title: Norfolk Portsmouth Belt Line (NPBL) Railroad Acquisition and Repair

#### **Project Location:**

Norfolk International Terminals 7737 Hampton Blvd. Norfolk, VA 23505

#### Project Description/Objective:

Over the past 10 years, the total volume of container traffic in the Port of Virginia marine terminals has increased at an annual rate of 8%. In CY 2007, more than 2.1 million twenty-foot equivalent units (TEUs) were handled by the Port. With the scheduled opening of the Heartland Corridor in early 2010, the recent clearance of the CSX double stack line to Atlanta, and the planned addition of the Third Lock in the Panama Canal by 2014, this trend is expected to continue to grow at an annual rate of 4.3% (as discussed in Virginia State Rail Plan). To meet the increased volume of container traffic, the Port has developed a multi-faceted strategy to increase the capacity and efficiency of its terminals. This includes replacing obsolete and aged infrastructure through a series of projects that will increase the number of ship berths, expand the container yards, and increase rail capacity.

The Port of Virginia moves a higher percentage of containers by rail than any other east coast port. Rail volume in 2007 increased 20% and remains the fastest growing sector of the Port's growth. As the only Port terminal with "on-dock" rail service, the Virginia Port Authority (VPA)'s Norfolk International Terminals (NIT) handle the vast majority of the intermodal container traffic. However, intermodal expansion is limited by the size and configuration of the existing rail yard, and has reached maximum capacity.

The Norfolk Portsmouth Belt Line (NPBL) Railroad Acquisition and Repair project will enable NIT to expand its train assembly and movement capacity, improve port railroad access and routing, and increase operating efficiency. The project involves the acquisition of 33.5 acres of NPBL property, and repair/upgrade of the freight rail yard, rail infrastructure, and associated railroad track totaling 16,632 track feet. The property is currently owned by the Norfolk & Portsmouth Belt Line Railroad Company, and is located on the east side of Hampton Boulevard in the northwest section of the City of Norfolk, Virginia. The property is bordered by Naval Station Norfolk and other commercial properties, and located directly across Hampton Boulevard from the NIT (see Figure 1). The property is rectangular in shape, ranging from 100 to 300 ft in width, and runs east-west about 6000 ft from Hampton Boulevard towards I-564 where it terminates at a railroad junction switch with a Norfolk Southern Railroad.

Acquisition will be based on the appraised fair market value of the property for continued reuse as a railroad facility and corridor. Repairs/upgrades to the property will consist of replacement of the existing railroad track infrastructure, including track, switches, ties, and stone ballast; construction of cargo handling, storage and processing facilities; installation of cargo loading, unloading, and transporting equipment; and expansion of supporting utility infrastructure systems. \$5,000,000 is planned for property acquisition (acreage and existing track) and \$3,500,000 for repair/upgrade of existing track and railroad infrastructure.

VPA's acquisition of the NPBL property would be done in conjunction with the Virginia Department of Transportation (VDOT) award of a \$17 million project in the Fall, 2008 to construct a bridged underpass to eliminate the at-grade rail crossing located on Hampton Blvd near Greenbrier Ave. The benefit of this bridged underpass will be maximized by the acquisition of the NPBL property by facilitating efficient train assembly, staging, and rail transport of containers to and from NIT, while allowing uninterrupted vehicle traffic flow on Hampton Blvd. Current funding of the NPBL project will allow the land acquisition and rail repair process to occur simultaneously with the scheduled design and construction of the bridged underpass, so that both projects come to full operational use immediately upon completion.

With a projected growth rate in container traffic in the Port of Virginia at an annual rate of 4.3%, the NPBL project will play a key role in the NIT overall strategy of increasing the annual volume of containers moved by rail from 250,000 TEU's to 500,000 TEU's. As this volume builds, the number of incoming & outgoing trains will increase from the current 6-7 per day to 12-14 per day. This will require increased efficiency of staging, assembly and movement of trains to the Norfolk Southern main lines. Railcars with loaded containers are staged in 2000 ft segments, and trains are assembled with three segments forming a 6000 ft length train. Due to real property constraints, NIT lacks uninterrupted track length to assemble a full 6000 ft train. The NPBL acquisition will provide NIT with this capability. The NPBL property also has a rail yard with the capacity to accommodate five additional 2000 ft train segments for rapid assembly of additional trains. This additional rail capacity will facilitate a much more efficient movement of cargo by rail and decrease container movements by truck, thus decreasing traffic congestion on local and state highways.

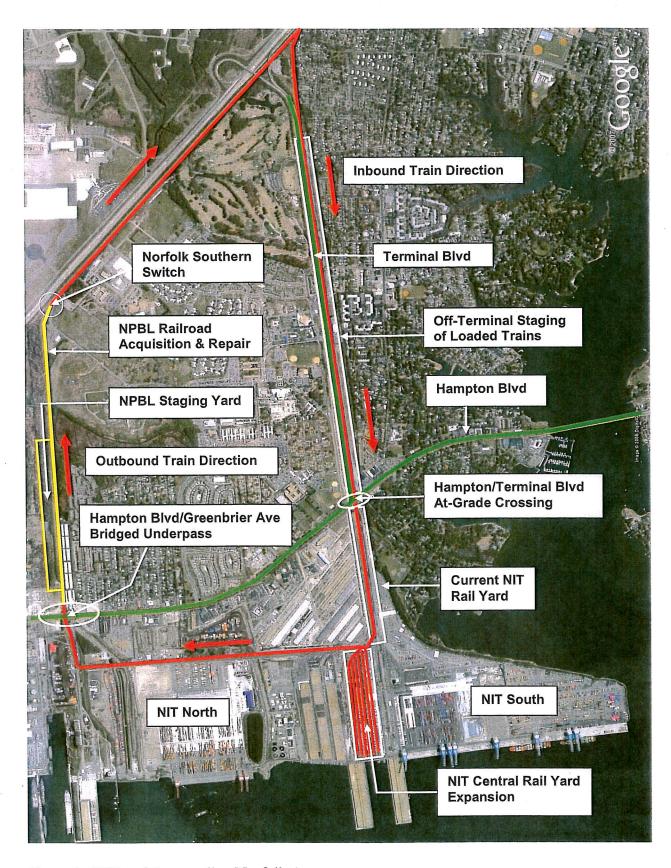


Figure 1: NIT and Surrounding Norfolk Area

Current NIT rail operations result in an average of 16 interruptions per day of vehicle traffic flow on Hampton Blvd at the Terminal Blvd at-grade rail crossing, due to incoming trains, as well as train assembly and staging operations. Over 21,000 vehicles per day travel over this crossing along this major access route to the U.S. Navy's largest naval base. NIT operating efficiency is also hampered by rail crossing restrictions three times per day totaling 5-1/2 hours during periods of high traffic volume on Hampton Blvd. Without the acquisition of the NPBL property, this number of vehicle interruptions is expected to grow by a minimum of 18 crossings per day as train segments are staged along Terminal Blvd, significantly increasing the congestion along this major thoroughfare.

The additional rail footage acquired and made usable through the NPBL Railroad Acquisition and Repair project will ensure train staging and assembly capacity meets terminal container production demand. The additional NPBL capacity will maximize the benefit of the Hampton Blvd – Greenbrier underpass project, significantly decrease at-grade rail crossings at Hampton/Terminal Blvd, decrease local and regional traffic congestion, and increase the Port's competitiveness while supporting several VTrans2025 and Virginia State Rail Plan goals.

### Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

The following additional projects (Figure 2), funded by the Virginia Port Authority (VPA) largely through Virginia International Terminals (VIT) terminal operations revenue, are related to NIT terminal and rail service expansion, and are in various stages of planning, design, or construction:

- 1. NIT Central Rail Yard Expansion. This project, a two-phase rail yard expansion project to be completed over a four year period, will enable NIT to increase the annual volume of containers (un)loaded by rail from 250,000 TEUs to 500,000 TEUs. The project, which will expand the Terminal's rail yard to a total capacity of 37,000 track feet, includes construction of an additional 24,000 feet of railroad track, ties and ballast, several switches, heavy-duty pavement in the rail yard area, container handling areas, and associated civil site utility and electrical infrastructure. Approximate construction cost: \$40 million. Rail Enhancement Funds are being separately sought for this project.
- 2. **NIT South Renovation.** This project entails the complete renovation of the south container yard of Norfolk International Terminals. The entire project area comprises approximately 150 acres and is being completed in stages so as not to interfere with cargo operations. Work began in 2004, and includes renovation of the entire container yard, construction of a 4230 ft wharf, installation of eight Suez-Class cranes, purchase of 70 straddle carriers, as well as utility upgrades and pavement improvements. Approximate construction cost: \$280 million.
- 3. **NIT North Wharf Extension.** This project includes extension of the existing wharf approximately 900 feet, dredging of the adjacent access channel and berth area, site civil work behind the wharf structure, and associated utility work. The project also includes the procurement of three container cranes similar to those at the south end of the NIT North Wharf. Approximate construction cost: \$57 million.



Figure 2: Norfolk International Terminals

- 4. NIT Shuttle Carrier Road. This project includes the construction of approximately 3,000 linear feet of heavy duty shuttle carrier pavement along Bulkhead Avenue from Third Street to Lagoon Avenue. Construction activities include erosion and sediment control, site demolition, earthwork, drainage, water distribution, asphalt pavement, concrete pavement, waterfront structural improvements, rail crossings, site lighting, electrical duct bank, utilities, traffic control, construction phasing, and tie-in with existing waterfront features, drainage lines and rail yard facilities. Approximate construction cost: \$8 million.
- 5. Commonwealth Railway Mainline Safety Relocation Project (CRMSRP). VPA is the lead state agency for this project, which is being partially funded with \$25.8 million in FY 07-09 Rail Enhancement Funds. This \$60 million undertaking will relocate the existing Commonwealth Railway (CWRY) mainline track to the medians of I-664 & the Western Freeway (Route 164), thus eliminating 14 at-grade rail crossings in Portsmouth & Chesapeake. The CRMSRP is part of the \$309 million Heartland Corridor, a multi-state, federally funded rail transportation improvement project of national significance that will improve overall rail access between the Port of Virginia & the markets of the Midwestern United States.

#### **Public Benefit of Project**

The benefits of the NPBL Railroad Acquisition and Repair project include:

- a. Eliminating over one-half (approximately 18/day) of the movements of trains along the Hampton/Terminal Blvd at-grade crossing outside the Terminal (trains will exit terminal at future Hampton Blvd/Greenbrier Ave bridged crossing). Over 21,000 vehicles per day are affected by this at-grade crossing
- b. Enhancing Port effectiveness and competitiveness through improvements to onterminal train staging, movement and assembly of full length trains.
- c. Maximizing the benefit of the Commonwealth's investment in the \$17 million Hampton Blvd Greenbrier underpass project.
- d. Relieving highway congestion by reducing the number of container truck movements along the local and regional road network.

The project also supports the following Virginia State Rail Plan goals:

- a. Promote safety and security by reducing the frequency of crossings at the Hampton/Terminal Blvd at-grade crossing.
- b. Improve system capacity, reliability and speed by facilitating increased container throughput at NIT and mitigating highway congestion.
- c. Improve intermodalism, connectivity and mobility by increasing the rail share of intermodal traffic at NIT.
- d. Improve Virginia's economic competitiveness and quality of life reducing congestion on roads, and reducing air pollution.
- e. Support Virginia DRPT Public-Private partnership efforts and program delivery by ensuring the project provides an excellent return on investment in terms of enhanced productivity, air quality improvement and reduced congestion.

Type of Project: Rail Facility & Infrastructure

Application Scope of Work Covers: Entire Project

**Project Budget Summary:** \$5,000,000 for property acquisition (acreage and existing track)

\$3,500,000 for repair/upgrade of existing railroad infrastructure; construction of bridged over/underpass crossings, cargo storage and handling facilities; installation of cargo loading/unloading/

transporting equipment; expansion of supporting utility

infrastructure systems. \$250,000 for design.

Total Project Budget: \$8,750,000

**Local Match Required by Applicant:** The Virginia Port Authority will provide a 50% match for this project by funding up to \$4,375,000 in acquisition and design/construction costs through terminal revenue funds from Virginia International Terminals (VIT) operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia).

#### Project Implementation Schedule (based in months). List major milestones of the project.

Phase I Environmental Site Assessment Complete: April 2005

Environmental Impact Report: August 2008 Property Acquisition: October 2008 (FY09)

Design Award: December 2008 Design Complete: July 2009

Construction Award: October 2009 (FY10) Construction Complete: September 2010

#### Statement of how this project promotes or does not preclude dual/multi-access use.

All rail lines will have access to the NIT Central Rail Yard, although the main line to NIT is owned by Norfolk Southern. Other rail lines have to pay a switching fee to Norfolk Southern in order to use the main line. CSX recently obtained double stack clearance to Atlanta, and has requested to access NIT via Norfolk Southern. This project will facilitate the simultaneous assembly of full length trains for multiple carriers.

#### List additional users of rail line, facility, and/or equipment.

Norfolk Southern Railroad

#### Identify any possible environmental issues/concerns within the scope of this project.

A Phase I environmental site assessment was completed in April, 2005. Per the report, the project will have minimal, if any, long term negative effects on the natural and physical resources at NIT. There will be no permanent negative impact on air or water quality, and the project will not consume any significant areas of land, water, or aquatic habitats.

#### **Required Attachments:**

- 1. Attachment A Project Data Information Form (Provided)
- 2. Attachment B Application Checklist (Provided)
- 3. Detailed cost, budget, and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D)
- 4. Certification of Match/% of Match/Documentation of Source of Match, Including Defined Match Source (Provided by Applicant)
- 5. Certification of Additive Investment (Provided by Applicant)
- 6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.
- 7. Statement from the owner of the facility that acknowledges the Commonwealth will have a public interest in private facilities impacted by this project (Provided by Applicant)

#### **Application and Attachment Certification**

Row PAGE P.E. DEPUTY CHIEF ENGINEER

To the best of my knowledge, all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure, except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

Date: 1-31-08

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#### Attachment A

#### Form A1 – Project Cost and Construction Period

First Construction Year: FY 2009

Last Construction Year: FY 2010

Fiscal Year	Total Project COST	Total DRPT COST		
2009	\$ 5,250,000	\$ 2,625,000		
2010	\$ 3,500,000	\$ 1,750,000		
Total	\$ 8,750,000	\$ 4,375,000		

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

# Attachment A Form A2 – Freight Service

	CATEGORY	UNITS	VALUE
	Steady State Demand – diversion of freight to rail from trucks: 250K TEU (20-ft equivalent-length	Carloads/Year	62,500
Semand	units) / 4 20-foot units (containers) / railcar		
Der	First Year of Diversion (62,500 / 4 years)	Carloads/Year	15,625
	Number of Years until steady state	Years	4

	CATEGORY	UNITS	VALUE
on	Rail Miles in Virginia (existing		7.01
		Miles	
pact	5280 ft/mile		
Im	Rail Miles in Virginia (routing after		10.16
roject	project completion): 53,632 ft/	Miles	
4	Number of Years until steady state		4
		Years	

	CATEGORY	UNITS	VALUE
ions	Railcars per Train (6000 feet per train/60 feet per railcar)	Railcars/Train	100
Convers	Rail Tons per Railcar (maximum payload for 20-ft container)	Tons/Railcar	23.76
			4
	Trucks per Railcar (TEUs)	Trucks (TEUs)/Railcar	

	CATEGORY	UNITS	VALUE	
ther	Change in Daily Delay for Freight Trains	Railcars/Train	Not Applicable	
0	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	Not Applicable	

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A5 – Demand Characteristics for 15-Year Performance Period

Manual Committee of the	
Performance Year	Performance Value * (Containers/Year)
1	62,500
2	125,000
3	187,500
4	250,000
5	250,000
6	250,000
7	250,000
8	250,000
9	250,000
10	250,000
14	250,000
12	250,000
13	250,000
14	250,000
15	250,000
Total	3,375,000

<sup>\*</sup> For Freight Service Projects - Car Loads or Containers per Year

#### Rail Enhancement Fund Project Application Checklist Attachment B

Date: January 31, 2008

Name of Applicant and Project: Virginia Port Authority Acquisition and Repair/Upgrade of Belt Line Railroad
Checklist for Application
1. Project is consistent with goals of applicable adopted state, regional and/or local plans.
_x_YesNo
2. Project is an Additive Investment to Virginia.
_x_YesNo
3. Project provides for, or does not preclude, shared or dual access opportunity.
_x_YesNo
4. Applicant has provided documentation and certification of at least a minimum 30% match.
_x_YesNo
5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.
_x_YesNo
6. Application is complete, including signature and specified number of copies provided, and Applicant has reviewed the Standard Agreement as provided in Appendix C.
_x_YesNo

# Norfolk Portsmouth Belt Line Railroad

# Detailed Project Budget Summary

Amount	\$ 5,000,000 \$ 250,000 \$ 3,500,000 \$ 8,750,000	Amount	\$ 4,375,000 \$ 4,375,000	Rail Enhancement Funds (DRPT)	\$ 2,500,000 (Property Acquisition) \$ 125,000 (Design) \$ 1,750,000 (Repair/Upgrade)	\$ 4,375,000
	(xisting Track)			VPA Funding	\$ 2,500,000 (Property Acquisition) \$ 125,000 (Design) \$ 1,750,000 (Repair/Upgrade)	\$ 4,375,000
rk	Property Acquisition (Acreage & Existing Track) Design Engineering Construction/Construct Mgmt Total Project Budget	st share	DRPT Participation (50.0%) VPA Local Match (50.0%)	Project Costs	\$ 5,000,000 \$ 250,000 \$ 3,500,000	\$ 8,750,000
Scope of Work	Property Acquisition Design Engineering Construction/Constru Total Project Budget	Funding Cost share	DRPT Partic VPA Local N	Fiscal Year	2009 2009 2010	Totals

#### Norfolk Portsmouth Belt Line Railroad

#### **Detailed Project Schedule**

Scope of Work Milestone Date

Phase I Environmental Site Assessment Completed April, 2005

Environmental Impact Report August, 2008

Property Acquisition October, 2008 (FY09)

Design Award December, 2008

Design Complete July, 2009

Construction Award October, 2009 (FY10)

Construction Complete September, 2010

#### Certification of Match

The Virginia Port Authority (VPA) has applied to the Commonwealth of Virginia for Department of Rail and Public Transportation Rail Enhancement Funds in the amount of \$3,625,000 to assist in funding the project to repair and upgrade the Belt Line Railroad. The percentage of Rail Enhancement Funding requested is 50% of the total estimated project cost.

The total estimated cost for the project is \$7,250,000. As an attachment to the funding application, this document certifies that VPA will provide a 50% funding match in the amount of \$3,625,000 from Virginia International Terminals operating revenues (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia), which constitutes the remaining balance of the estimated cost.

Left Florin

Chief Engineer

#### Certification of Additive Investment

This certifies that the Commonwealth of Virginia Rail Enhancement Funds requested in this application will add significant capital improvements to the state's rail infrastructure, and result in public benefits to the Commonwealth that are greater than the actual amount of public funds invested.

Jeff Florin

Chief Engineer

# Statement from the Applicant SWAM Participation Goals to be Achieved by the Project

This is to certify that the Virginia Port Authority will work to achieve the Small, Womenowned, and Minority-owned (SWaM) participation goals in the project for which these Rail Enhancement Funds are requested, as directed by Executive Order 33 (2006) from the Governor of the Commonwealth of Virginia.

Jeff Florin

Chief Engineer

# Statement from the Applicant Acknowledgement of Commonwealth Public Interest

This statement from the Virginia Port Authority acknowledges that the Commonwealth of Virginia will have a public interest in the facilities, materials, equipment, and improvements funded or impacted by this project.

Min P. Mos for 7.15.

Chief Engineer